
Research Article



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**A study on impact of clinical pharmacist intervention on awareness, assesment,
counselling and educating to quit smoking**

Praveen Kumar M*, Manasa D, Zaibunnisa Firdous Fatima, Umme Amara, Venu Babu S,
Ahmadi Sultana, N. Sriram

Assistant Professor, Pharmd Interns, Department Of Pharmacy Practice, Hits College Of Pharmacy,
Bogaram, Keesara, Medchel, Telangana, India.

Abstract**Objectives**

Primary objective: The Impact of Clinical Pharmacist Interventions on Awareness, Assessment, Counselling and Educating to quit smoking.

Methodology

This was prospective, interventional and survey based study. . This study was approved by the ethical committee. The study was conducted at Ghatkesar village, Ranga reddy district. In this programmed 300 individuals were enrolled and 207 individuals registered for ready to quit smoking cigarettes. It is inferred that out of 300 smokers we find more number of people who started the duration of <1 year smoking cigarettes are in between 1-5 cigarettes I.e., 209 (69.7%) cigarette smokers, 104 (34.7%) are doing employee 101 (33.7%) are doing business, 50 (16.7%) are students, the smoking cigarettes are more in the age group between 21-30 are in between 1-5 cigarettes I.e., 137 (45.7%) cigarette smokers, number of cigarette smokers are in the reason of smoking cigarette for the relief I.e., 117 (39%). The P value was found to be highly significant i.e., <0.001**.

Introduction

A cigarette is a small cylinder of finely cut tobacco leaves rolled in thin paper for smoking. The cigarette is ignited at one end and allowed to smoulder; it's smoke is inhaled from the other end, which is held in or to the mouth; in some cases, a cigarette holder may be used, as well. Most modern manufactured cigarettes are filtered and also include reconstituted tobacco and other additives. [1]

The term cigarette as commonly used refers to a tobacco cigarette, but can apply to similar devices containing other substances such as cannabis. A cigarette is distinguished from a cigar by its smaller size, use of processed leaf and paper wrapping, which is normally white though other colours and flavours are also available. Cigars are typically composed entirely of whole-leaf tobacco. [17]

Tobacco was first introduced in the kingdom of Adil Shahi, the capital city of Bijapur, presently in Karnataka in south India, along the trading route of the Portuguese. Asad Beg, ambassador of the Mughal Emperor Akbar, visited Bijapur during 1604-1605 and took back large quantities of tobacco from Bijapur to the Mughal Kingdom in the north and presented some to Akbar along with jewel-encrusted European-style pipes. [13]

Cigarette smoke is a complex mixture of chemicals. Some smoke components, such as carbon monoxide (CO), hydrogen cyanide (HCN) and nitrogen oxides, are gases. Others, such as formaldehyde, acrolein, benzene and certain N-nitrosamines, are volatile chemicals contained in the liquid- vapour portion of the smoke aerosol. Still others, such as nicotine, phenol, poly aromatic

hydrocarbons (PAHs) and certain tobacco-specific nitrosamines (TSNAs) are contained in the submicron-sized solid particles that are suspended in cigarette smoke. [1]

Objectives

Primary objective

- The Impact of Clinical Pharmacist Interventions on Awareness, Assessment, Counselling And Educating to quit smoking.

Secondary objectives

- To educate young people about the risks associated with smoking.
- To evaluate the benefits of quitting smoking.
- To describe the effects of second hand smoke.
- To identify environmental and social factors related to smoking.
- To discuss health impacts of smoking.
- To assess the effects of the intervention on smoking cessation rates.
- To increase awareness of smoking laws and legislation.
- To calculate and contextualize the monetary cost of smoking cigarettes.

Methodology

Study site

The present study was conducted at Ghatkesar village, Ranga reddy district.

Study design

This was prospective, interventional and survey based study.

Study period

The study was carried out for a period of 6 months starting from December 2015 to May 2016.

Study Criteria

Inclusion Criteria

- Smokers are either gender.
- Individuals who are above 13 years of age.
- Smokers who are willing to sign and participate in the study by giving the consent form.

Exclusion Criteria

- Patients who are not willing to give the consent.
- Pregnancy/lactation women
- Smoking users who are bed ridden.

Sources of data

Study materials

- Smoke user's data collection forms including knowledge, questionnaires regarding tobacco.
- Patient information leaflets on tobacco cessation.
- Registration form
- Fagerstrom Scale.

1. Smoking user's data collection forms (Appendix I)

It contains the demographic and socio demographic details of the subjects like age, sex, education, occupation and smoking. And it includes knowledge and questionnaires.

Questionnaires was designed and prepared based on the parameters to be evaluated and previously available questionnaires in the literatures. Questionnaire contains components to assess the Educational and Knowledge towards smokers and non-smokers. During the survey the tobacco user's data collection were used. And it was designed by project team.

2. Patient information leaflets (Appendix II)

It contains the tobacco hazards information and regarding the consequences of the tobacco use and it was designed by the project team and during the survey the patient information leaflets were distributed.

3. Registration form (Appendix III)

It is designed by project team to call for the public awareness programme for public and provide education, motivation. And it contains the total demographic details of the register like age, sex, occupation and address of the individual who are register to quit from tobacco use.

Study procedure

Smoking awareness programs were conducted in college students, school children, farmers, tobacco vendors and skits, drama, role play also be a part of the programme. Also planned to conduct in villages where people were using tobacco in different ways. These awareness programmes will be conducted in

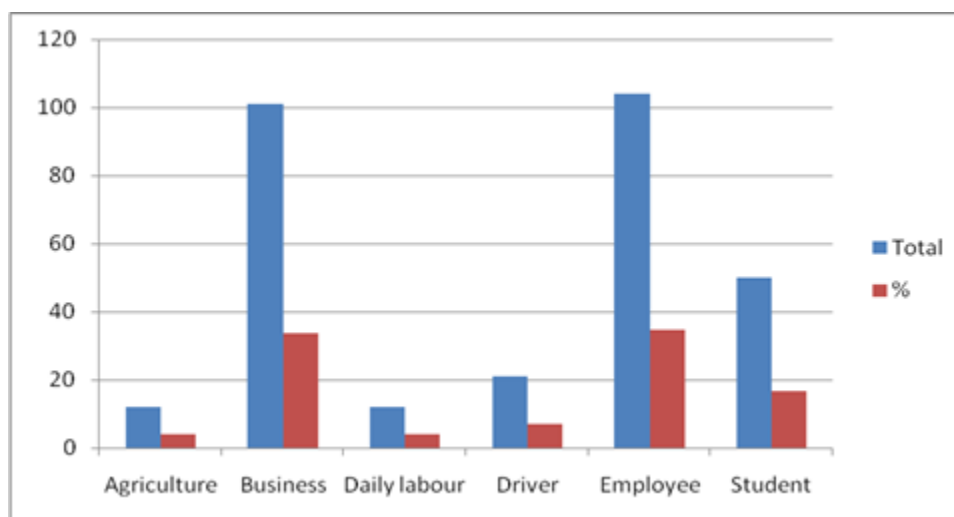
association and consultation with organisation and gram panchayat in a systematic manner. Smokers and non-smokers are included in this study and initial psychosocial assessments constitute this analysis. Participants were identified from appointment schedules and were enrolled after providing informed consent form when they came to the exam for routine visits.

At enrolment, tobacco users were interviewed and completed a series of questionnaires that included measures the tobacco use severity, tobacco control, and psychosocial covariates. smoking severity was assessed with the Severity of Smoke Check (SC) with the help of Fagerstrom Scale.

Results and Discussion

Table 1: Comparison of NO.OF CIGARETTES/DAY with Occupation

OCCUPATION	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
Agriculture	2	9				1		12	4
Business	52	40	5	3		1		101	33.7
Daily labour		6	1	2	1	1	1	12	4
Driver	13	8						21	7
Employee	61	36	4	2			1	104	34.7
Student	38	10	2					50	16.7

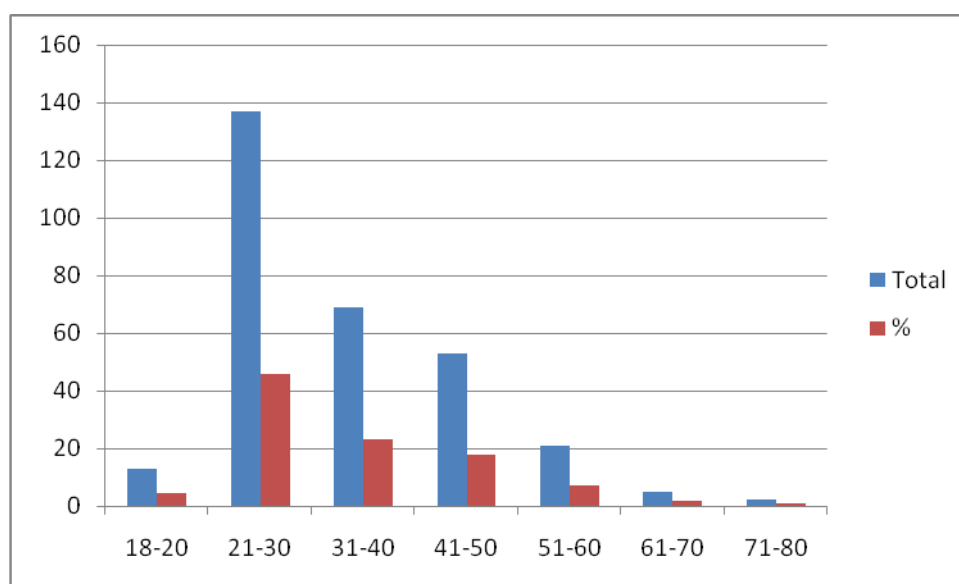


From the Above table it is inferred that out of 300 smokers, 104 (34.7%) are doing employee 101 (33.7%) are doing business, 50 (16.7%) are

students, 21 (7%) are drivers, 12 (4%) are daily labours equal to the 12 (4%) agriculture.

Table 2: Comparison of NO.OF CIGARETTES/DAY with Age

AGE	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
18-20	11	2						13	4.3
21-30	88	43	4	2				137	45.7
31-40	37	26	4	1			1	69	23
41-50	25	23	3	1			1	53	17.7
51-60	4	14		2		1		21	7
61-70	1		1	1	1	1		5	1.7
71-80		1				1		2	0.7

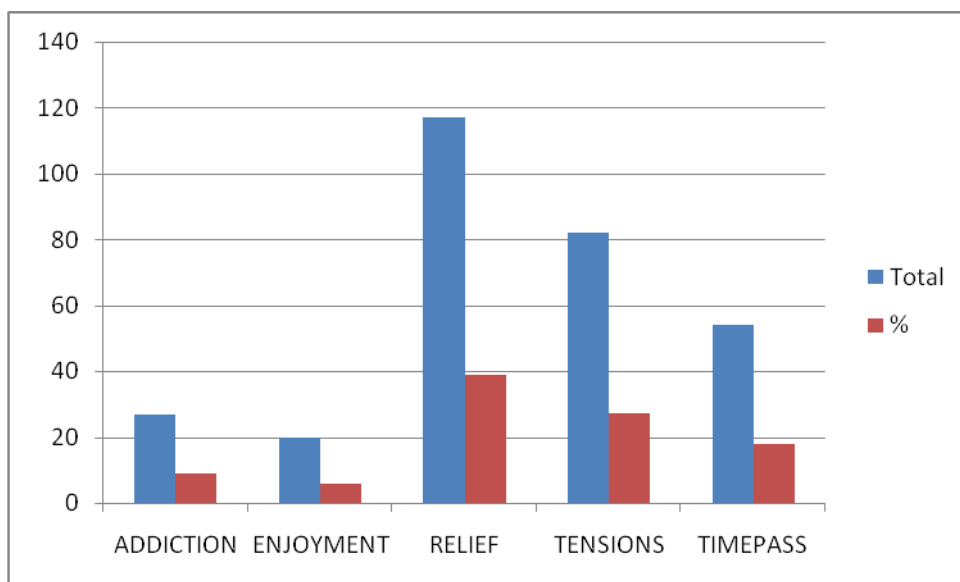


From the Above table it is inferred that out two smokers, we conclude that the smoking cigarettes are more in the age group between 21-30 are in between 1-5 cigarettes I.e., 137 (45.7%) cigarette

smokers followed by 31-40yrs I.e., 69 (23%), 61-70yrs age group I.e., 5 (1.7%) more than the age group 71-80yrs I.e., 2 (0.7%).

Table 3: Comparison of NO.OF CIGARETTES/DAY with Reason for smoking

REASON FOR SMOKING	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
ADDICTION	11	14		1			1	27	9
ENJOYMENT	14	6						20	6
RELIEF	75	37	5					117	39
TENSIONS	26	41	7	4	1	3		82	27.3
TIMEPASS	40	11		2			1	54	18

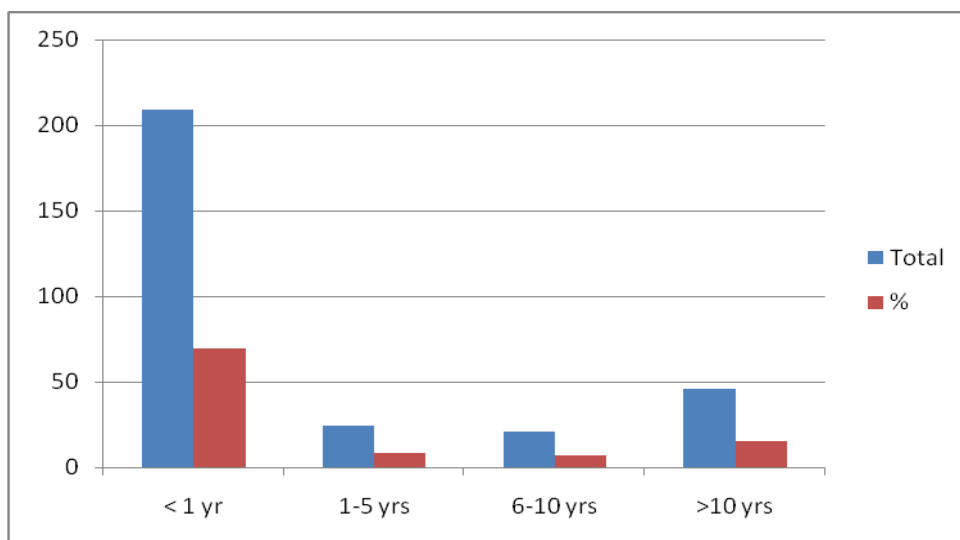


From the Above table it is inferred that out of 300 smokers, we find more number of cigarette smokers are in the reason of smoking cigarette for the relief I.e., 117 (39%), cigarette smokers

followed by tensions i.e., 82 (27.3%), time pass I.e., 57(18%) more than the addiction I.e.,27(9%) and enjoyment I.e., 20 (9%).

Table 4: Comparison of NO.OF CIGARETTES/DAY with DURATION

DURATION	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
< 1 yr	125	72	6	4	1	1		209	69.7
1-5 yrs	14	9	1					24	8
6-10 yrs	14	7						21	7
>10 yrs	13	21	5	3		2	2	46	15.3



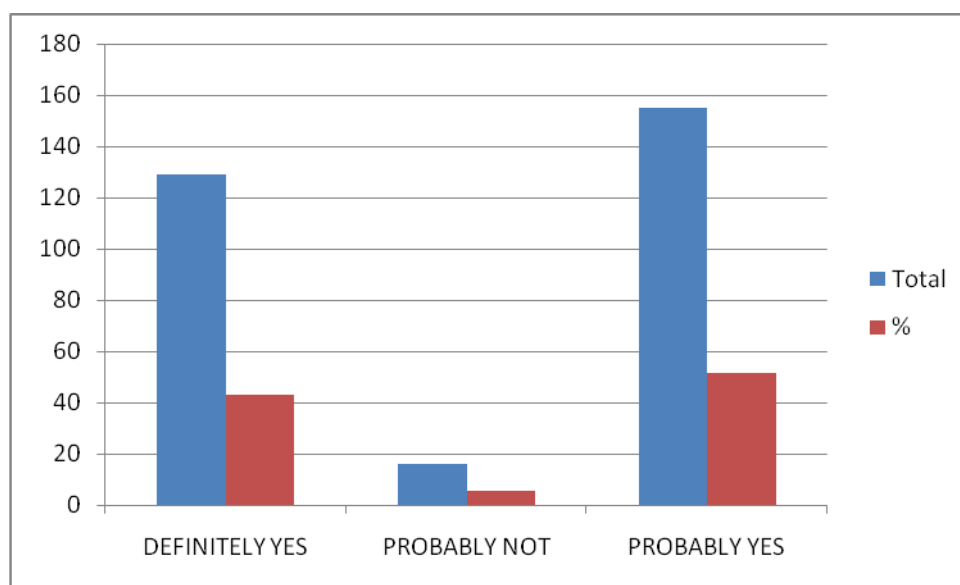
From the Above table it is inferred that out of 300 smokers we find more number of people who

started the duration of <1 year smoking cigarettes are in between 1-5 cigarettes I.e.,209 (69.7%)

cigarette smokers followed by 1-5 yrs duration i.e., 24 (8%), 6-10 yrs duration I.e.,21 (7%).

Table 5: Do you believe that tobacco causes cancer ?

RESPONSE	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
DEFINITELY YES	68	58	1	2				129	43
PROBABLY NOT	8	5	1			2		16	5.3
PROBABLY YES	90	46	10	5	1	1	2	155	51.7

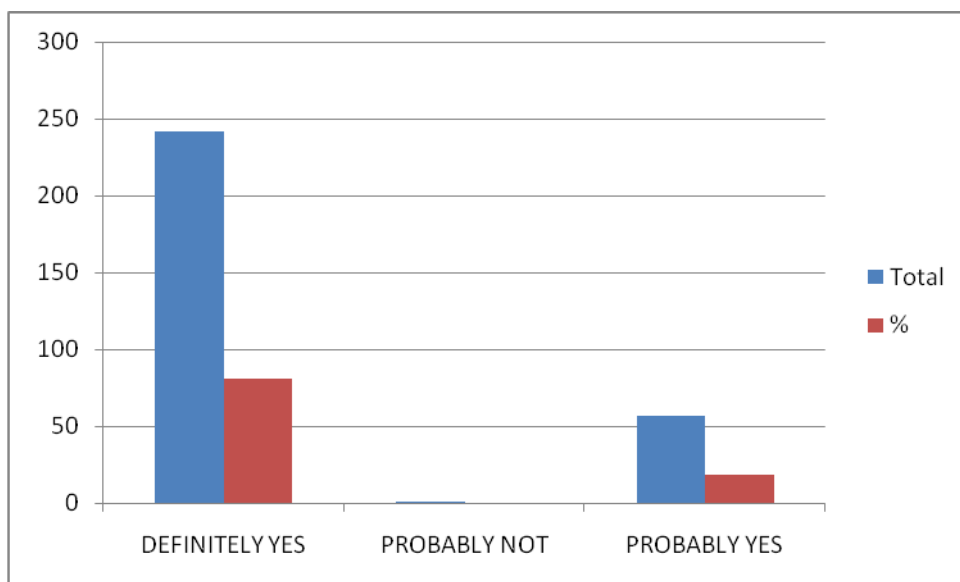


From the Above table it is inferred that out of 300 smokers they response for the Above question we find more number of smokers said probably yes

I.e., 155 (51.7%), followed by definitely yes I.e., 129 (43%) more than probably not I.e., 16 (5.3%).

Table 6: Do you believe that tobacco control is essential for public health?

RESPONSE	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
DEFINITELY YES	137	86	7	6	1	3	2	242	80.7
PROBABLY NOT	1							1	0.3
PROBABLY YES	28	23	5	1				57	19

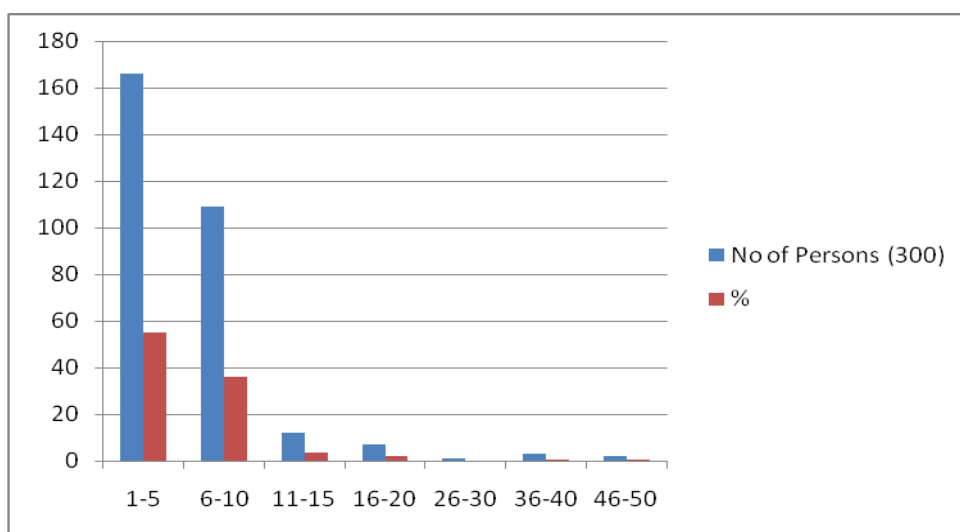


From the Above table it is inferred that out of 300 smokers they response for the Above question we find more number of smokers said definitely yes

I.e., 242 (80.7%) followed by probably yes I.e., 57 (19%) more than probably not I.e.,1 (0.3%).

Table 7: Comparison of consumption no of cigarettes per day with persons

No of Cigarettes Per Day	No of Persons (300)	%
1-5	166	55.3
6-10	109	36.3
11-15	12	4
16-20	7	2.3
26-30	1	0.3
36-40	3	1
46-50	2	0.7



From the Above table it is inferred that out of 300 smokers, we conclude that the cigarette smokers

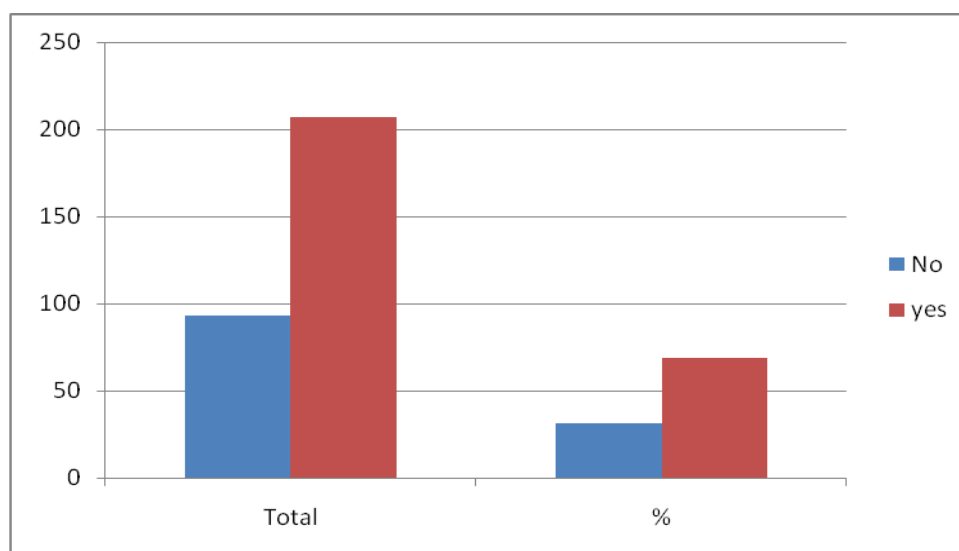
are more in between 1-5 cigarettes I.e., 166 (55.3%) cigarette smokers followed by 6-10

cigarettes I.e., 109 (36.3%), 11-15 cigarettes I.e., 12 (4%), 36-40 more than the smoking cigarettes

46-50 I.e., 2 (0.7%), 26-30 cigarettes I.e., 190 (0.3%).

Table 8: shows no persons ready to quit with no of cigarettes per day

READY TO QUIT	NO.OF CIGARETTES/DAY							Total (300)	%
	1-5	6-10	11-15	16-20	26-30	36-40	46-50		
No	66	23	1	3				93	31
Yes	100	86	11	4	1	3	2	207	69



From the Above table it is inferred that out of 300 smokers, we identify the smoking cigarettes ready to quit or not, many smokers response for this

question said 'yes' I.e., 207(69%) and said 'no' I.e., 93 (31%).

Table 9: Fagerstrom severity scale score

Question Wise Severity Score	Before Counselling		After Counselling	
	Score	Mean±std	Score	Mean±std
1. how soon after you wake up do you smoke your first cigarette?	220	1.97±0.92	195	1.51±0.96
2. do you find it difficult to refrain from smoking in places where it is forbidden?	61	0.55±0.56	33	0.4±0.47
3. what cigarette would you hate most to give up?	78	0.72±0.48	45	0.5±0.4
4. how many cigarettes per day do you smoke?	35	0.34±0.7	12	0.12±0.31
5. do you smoke more frequently during the first hours after waking than during the rest of the day?	55	0.5±0.6	34	0.31±0.35
6. do you smoke when you are so ill that you are in bed most of the day?	20	0.21±0.41	10	0.11±0.21

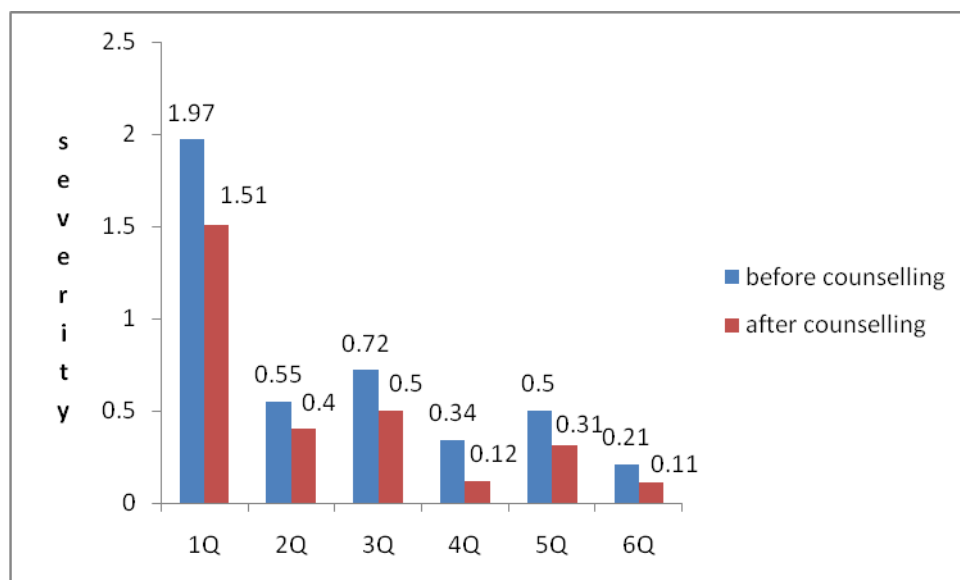
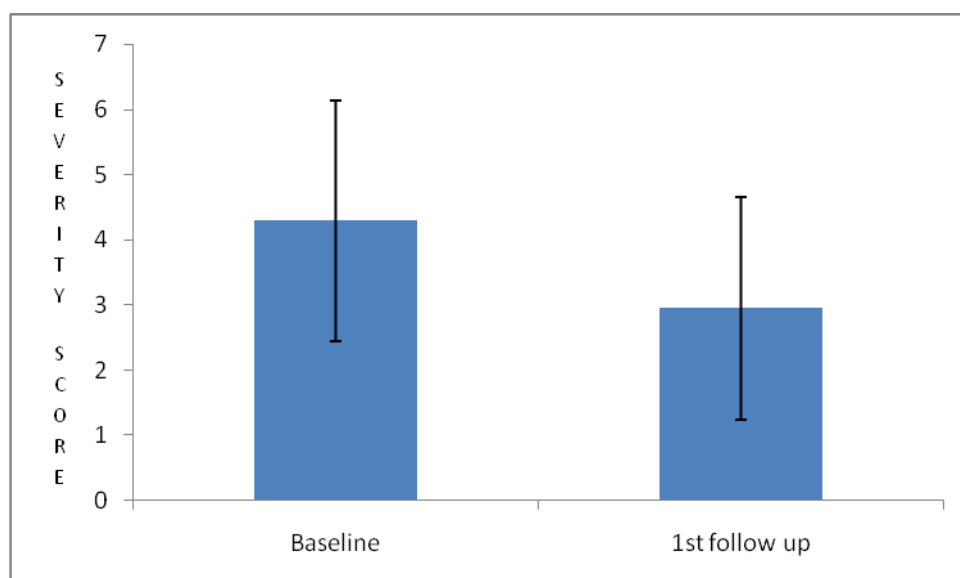


Table 10: Comparison of Fagerstrom severity scale score between baseline and first follow up

severity scale	Total score	Mean	Std. Deviation	P value
Baseline	469	4.29	1.85	
1st follow up	329	2.95	1.71	P<0.001**



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5. Correspondence: Rebecca Murphy-Hoefer, Ph.D., M.P.H., Office on Smoking and Health, Centers for Disease Control and Prevention, Mail Stop K-50, Atlanta, GA 30341 USA. Tel.: +1 (770) 488-5345; Fax: +1 (770) 488-5844;
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